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NOTICE OF ALLOWANCE AND FEE(S) DUE

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MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA. VA 22182-3817 EXAMINER NOUVEN THING T

ART UNIT PAPER NUMBER

2818 DATE MAILED: 05/27/2009

APPLICATION NO. FILING DATE HIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFERMATION NO.

10715,376 11/19/2003 Jonathan Zanhong Sun YOR920030332US1 5483

TITLE OF INVENTION: SPIN-CURRENT SWITCHED MAGNETIC MEMORY FLEMENT SUITABLE FOR CIRCUIT INTEGRATION AND

METHOD OF FABRICATING THE MEMORY ELEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/27/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includired below or directed oth	ig the Patent, advance on herwise in Block 1, by (a	rders and notification of a a) specifying a new corre	maintenance fees w spondence address;	ill be and/o	mailed to the current (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
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8321 OLD COU SUITE 200	RTHOUSE ROAD	⁽²⁰⁰⁹ OPERTY LAW G	ROUP, PLLC 1 be	Cer	tificate	of Mailing or Trans	
VIENNA, VA 2	2182-3817						(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	08/27/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS	1			
NGUYEN,	THINH T	2818	257-295000	•			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA	nge of Correspondence 'Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atte listed, no name will be THE PATENT (print or ty data will appear on the r	o 3 registered paten vely, le firm (having as a agent) and the name wreeys or agents. If a printed.	memb es of u no nan	er a 2 p to ie is 3	ocument has been filed for
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	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	ired) will not be accepted tes Patent and Trademark	d from anyone other than to Office.	the applicant; a regi	stered	attorney or agent; or the	ne assignee or other party in
Authorized Signature				Date			
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10/715,376	11/19/2003	Jonathan Zanhong Sun	YOR920030332US1	5483	
21254 75	590 05/27/2009		EXAMINER		
MCGINN INTE	LLECTUAL PROPE	NGUYEN, THINH T			
8321 OLD COUR	THOUSE ROAD	ART UNIT	PAPER NUMBER		
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21254 75 MCGINN INTE	590 05/27/2009 LLECTUAL PROPE THOUSE ROAD	Jonathan Zanbong Sun RTY LAW GROUP, PLLC	EXAM NGUYEN, ART UNIT	THINH T PAPER NUMBER	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 136 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 136 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/715.376 SUN ET AL. Notice of Allowability Examiner Art Unit THINH T NGUYEN 2818 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 3/23/2009. The allowed claim(s) is/are 1-15,17-25,30-34,37-45. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Thinh T Nguyen/

Primary Examiner Art Unit 2818 Application/Control Number: 10/715,376 Page 2

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DETAILED ACTION

1. Claims 1-15, 17-25, 30-34, 37-45 are pending in the Application.

 Upon Examining all the claims, generic Claim 1 is deemed allowable, therefore withdrawn claims 2-7, 9-11, 13-15, 17-25, 30-34 that have all the limitations of the genus

Reason for allowance

Claims 1-15, 17-25, 30-34, 37-45 are allowed.

(generic claims 1) will be rejoined and allowed.

The following is an examiner's statement of reason for allowance:

None of the references of record teaches or suggests the claimed SPIN-CURRENT SWITCHED MAGNETIC MEMORY ELEMENT having the limitations:

--"said perpendicular magnetic anisotropy component, Hp, comprises one of: an interface-induced perpendicular magnetic anisotropy component which originated at an interface within a multilaver structure in the free magnetic laver;

a strain-induced perpendicular magnetic anisotropy component which originated within at least one of the fixed magnetic layer and free magnetic layer, and

a crystalline anisotropy-induced perpendicular anisotropy component which originated within at least one of the fixed magnetic layer and free magnetic layer. '--

In combination with all other limitations as recited in claims 1, 40, 42.

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Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance".

Conclusion

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The

examiner can normally be reached on Monday-Friday 9:30am-6:30pm.If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached

at 571-272-1657. The fax phone number for the organization where this application or proceeding

is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval [PAIR] system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thinh T Nguyen/ Patent Examiner

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